

U.S. Army Corps of Engineers Honolulu District

# **Public Notice**

Public Notice No.
POH-2007-144

Reply to:
Regulatory Branch (CEPOH-EC-R)
U.S. Army Engineer District, Honolulu
Building 230

Date:
May 22, 2007

Respond by:
June 21, 2007

#### POH-2007-144

Fort Shafter, Hawaii 96858-5440

# APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT: ROUTE 001 SHORELINE PROTECTION AND ROAD REPAIR AT FAGAITUA VILLAGE, TUTUILA, AMERICAN SAMOA

- **1.** <u>APPLICANT</u>: Department of Public Works, American Samoa Government, Pago Pago, American Samoa 96799
- **2.** <u>AGENT</u>: Mr. Scott Sullivan, Sea Engineering, Inc., Makai Research Pier, 41-305 Kalanianaole Highway, Waimanalo, Hawaii 96795
- **3.** <u>APPLICABLE STATUTORY AUTHORITY</u>: Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403)
- **4.** <u>LOCATION OF PROPOSED ACTIVITY</u>: The project site extends along approximately 450 feet of shoreline fronting the village of Fagaitua, Tutuila, American Samoa (Figure 1).

## 5. PURPOSE AND DESCRIPTION OF PROJECT:

The purpose of the project is to reconstruct a storm-damaged, 450-foot reach of Route 001 fronting Fagaitua and to provide adequate and permanent shore protection to prevent future damage. The coastal highway is directly exposed to storm waves, and the shoreline was eroded and the road damaged by Hurricane Heta in 2004. An existing, undersized drainage culvert would also be replaced with a larger box culvert. The project reach is identified as "Critical" in the American Samoa Shoreline Inventory III (USACE, 2006). The project is funded by the Federal Highway Administration.

To provide the desired permanent protection, the applicant proposes to construct approximately 410 linear feet of new rock revetment between the new drainage culvert to be constructed at the west end and an existing culvert at the east end (Figures 2, 3). The revetment would consist of an armor layer of 1,500 to 2,500 pound stone, keyed and fitted to form a single layer 2.3 feet thick, placed over a 2.2 foot thick underlayer of 150 to 300 pound stone and geotextile filter fabric. A

5-foot wide rock toe scour apron would be embedded 4.5 feet below the existing sea bottom. Fill in waters of the U.S. for revetment construction would include including approximately 1,055 cubic yards of armor stone, 1,120 CY of underlayer stone, and 1,775 square yards of geotextile fabric.

The new 5-foot by 9-foot (inside dimensions) box culvert would be constructed in increments based on the length of pre-cast box culvert sections, and would involve excavation, pouring of tremie concrete to seal and level the bottom, placement of the culvert section, and backfilling and compacting as necessary. The total length of the culvert, including headwalls and scour aprons, would be 52 feet. The invert of the culvert would be about 0.0 feet MSL (mean sea level). Fill in waters of the U.S. for culvert construction would include approximately 70 CY of cast concrete, 21 CY of tremie concrete, 8 CY of CRM (for scour apron), and 6 CY of stone aggregate.

The total area of fill in waters of the U.S. for the revetment and culvert construction would be approximately 7,435 square feet (0.17 acres).

Silt curtains would be deployed during the work to minimize movement of project-related suspended materials across the inshore marine environment.

## 6. IMPACTS OF PROPOSED ACTIVITIES IF AUTHORIZED:

The proposed revetment site abuts the existing paved roadway. The shoreline at the project reach has been disturbed by previous dredging, road construction, and repair of previous storm damage. The American Samoa Shoreline Inventory (USACE, 2006) notes the presence of a loose, deteriorating rock revetment of piled rocks 4 inches to 2.5 feet in diameter, averaging 1 foot in diameter, in poor condition, and with rocks slumping into the foreshore. The marine substrate at the project site consists primarily of limestone reef rock, sand, rock, and boulders. The shallow and wide fringing reef of Fagaitua Bay, which is exposed at extreme low tide (with a typical reef flat elevation of -1 feet MSL), borders the shoreline. The marine biological community of the project site would be directly impacted by construction activities, but new habitat for marine organisms would be created by the construction of the new revetment.

Construction activities have the potential to cause a temporary increase in turbidity in inshore waters, but this potential impact is expected to be minimized by the applicant's use of silt curtains and other measures to avoid or reduce effects on the aquatic environment. The construction contractor would be required to prepare an environmental protection plan and best management practices (BMPs) plan prior to initiation of construction activities. Project construction would result in only minor and temporary local increases in dust and noise.

The project is not expected to have any significant long-term adverse environmental impacts. Providing permanent shore protection for the shoreline and road would avoid or reduce the future need for repair of storm damage. The project would enhance the safety and well being of residents by improving safe access to and from villages at the east end of Tutuila during and after severe storms. Because such revetment projects are normally sited where erosion is recurring and critical infrastructure is present, the number of such projects is naturally limited and cumulative effects are not considered to be significant.

## 7. IMPACT ON HISTORIC PROPERTIES:

The Area of Potential Effect (APE) of the proposed project includes all areas involving excavation of the existing substrate, including the revetment site and existing culvert. The APE has been previously disturbed during roadbed construction and repair. The Corps has consulted the on-line version of the National Register of Historic Places (NRHP) for the presence or absence of historic properties, including those listed in or eligible for listing in the National Register of Historic Places, and has determined that there are no listed or eligible properties in the vicinity of the proposed worksite. With inclusion of suitable conditions to insure appropriate actions in the event of discovery of previously unidentified resources, it appears that there would be "no properties affected" by the proposed undertaking. This notice has been sent to the American Samoa Historic Preservation Office (ASHPO). Any additional comments ASHPO may have concerning archaeological or historic resources that may be lost or destroyed by work under the present project will be considered before a final decision is made on the permit application.

## 8. <u>IMPACT ON ENDANGERED SPECIES</u>:

No federally protected species is known to occur within the project site, although federally protected sea turtles are known to occur in the marine waters surrounding American Samoa, including the endangered leatherback sea turtle (*Dermochelys coriacea*), endangered hawksbill sea turtle (*Eretmochelys imbricata*), threatened loggerhead sea turtle (*Caretta caretta*), and threatened green sea turtle (*Chelonia mydas*). There is no sandy beach or other potential turtle nesting habitat within the project reach. With deployment of silt fences and inclusion of other appropriate BMPs the project is unlikely to result in any significant disturbance to sea turtle foraging opportunities.

Based on the location and nature of the proposed work, the lack of suitable turtle nesting habitat at the project site, and the potential for only minimal disturbance to sea turtle foraging opportunities, it appears the project "may affect, but is not likely to adversely affect" sea turtles or other species listed as threatened or endangered under the Endangered Species Act. This notice has been sent to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service in accordance with Section 7 of the Endangered Species Act. Any comments they have on endangered or threatened species, or their critical habitat, will be considered before a final decision is made on the permit.

#### 9. <u>IMPACT ON ESSENTIAL FISH HABITAT (EFH)</u>:

The marine environment is designated coral reef EFH, consisting of typical fringing reef components which contribute to maintenance of fisheries. The magnitude of potential impacts of the proposed project on EFH is dependent on the degree of movement onto the seaward reef of sediments or other materials disturbed during project construction. With the incorporation of suitable BMPs to control effects of the construction, the proposed project is not expected to adversely affect any Essential Fish Habitat (EFH) identified pursuant to the Magnuson-Stevens Fishery and Management Act.

## 10. OTHER GOVERNMENT AUTHORIZATIONS/CERTIFICATIONS:

Before a DA permit can be issued, the applicant must first obtain an American Samoa Coastal Management Program federal consistency certification issued by the Department of Commerce and a Section 401 Water Quality Certification issued by the American Samoa Environmental Protection Agency.

## 11. EVALUATION FACTORS:

The decision whether to issue the requested permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof: among these are conservation, economics, aesthetics, general environmental concerns, wetlands, historic values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

## 12. COMMENTS AND INQUIRIES:

Interested parties may submit in writing any comments that they have on the proposed permit. Comments should be forwarded so as to reach this District no later than the response date indicated on the first page of this notice. Mailed comments should cite this notice and should be sent to: Regulatory Branch (CEPOH-EC-R/P. Galloway); U.S. Army Engineer District, Honolulu; Building 230; Fort Shafter, Hawaii 96858-5440. Alternatively, comments may be transmitted via e-mail to *CEPOH-EC-R@usace.army.mil* or faxed to (808) 438-4060. If needed, further information may be obtained from Peter Galloway via telephone at (808) 438-8416. This notice is also available at the Honolulu District web site (*www.poh.usace.army.mil*).

## 13. <u>REQUEST FOR PUBLIC HEARING</u>:

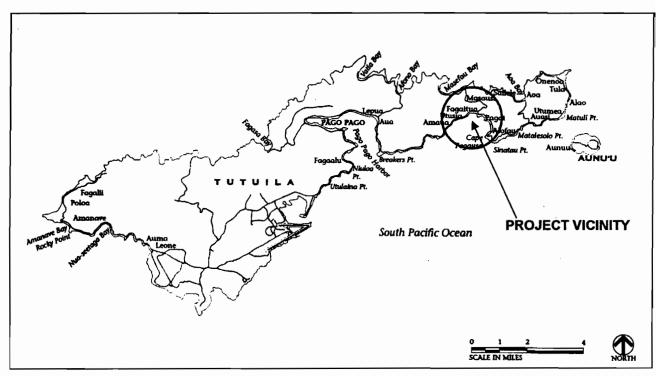
Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the proposed permit. Requests for public hearing shall specifically state the reasons for holding a public hearing.

#### **Attachments:**

Figure 1. Project Location

Figure 2. Project Plan

Figure 3. Typical Revetment and Culvert Cross Sections



**Project Vicinity** 

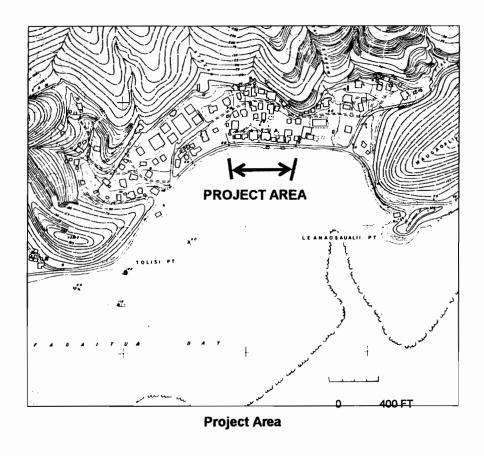


Figure 1. Project Location

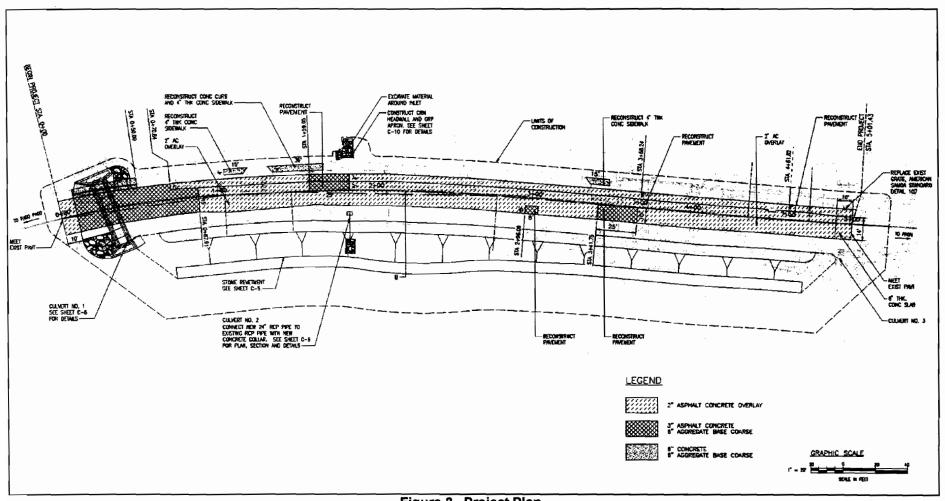
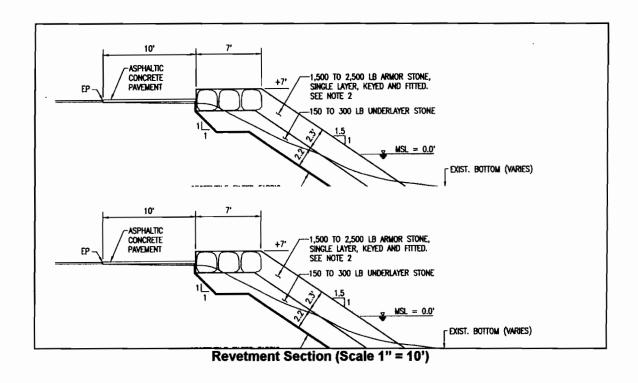


Figure 2. Project Plan



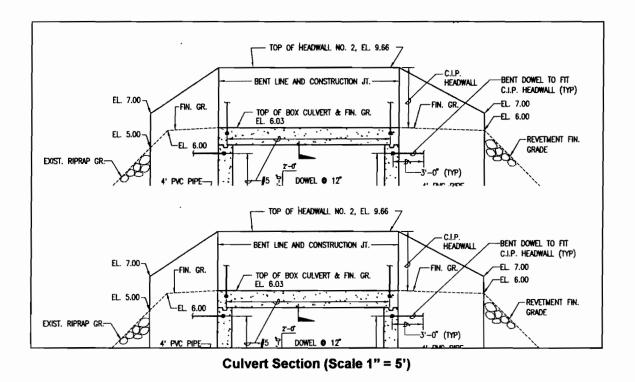


Figure 3. Typical Revetment and Culvert Cross Sections